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Non-conviction DNA databases in the United States and England: historical differences, current convergences?

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Abstract Collecting DNA from crime scenes and individuals and storing it in databases is regarded increasingly as critical for criminal investigation and prosecution. This article considers the development of non-conviction DNA databases in the United States and England and Wales, and examines why current legal trajectories are in opposite directions, with the United States becoming more permissive in terms of database expansion and England and Wales less so. It posits that any such trend is contingent on many factors. Political and cultural variables in England and Wales prompted database expansion, facilitated by the absence of robust constitutional protection for privacy. Nevertheless, the jurisprudence of the European Convention on Human Rights now limits this scheme. In contrast, classical liberal ideology and the construal of the norm of privacy provided a brake in the American context, yet it appears that non-conviction databases will become more common there given extant interpretation of the US Constitution.

Keywords DNA (deoxyribonucleic acid) retention; Non-conviction databases

The collection of DNA (deoxyribonucleic acid) from crime scenes and from individuals is regarded increasingly in political, policing and popular discourse as a critical aspect of effective modern criminal investigation and prosecution. The benefits of gathering and comparing DNA are manifold:

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suspects may be more readily and speedily identified, innocent persons may be ruled out and the wrongfully convicted exonerated, while the enhanced likelihood of detection may deter some would-be criminal actors. Beyond this, the rationale for creating repositories in which to hold such DNA on an ongoing basis is that it allows for later automated speculative (or ‘cold’) searching, thereby facilitating comparisons between stored samples and material collected subsequently from crime scenes or victims rather than requiring renewed or repeat individual collection. Despite the consensus regarding DNA’s significance for criminal justice, policies governing collection and retention of genetic material differ greatly between jurisdictions. In particular, the issue is most fraught and divisive concerning arrestees, or ‘non-convicted’ persons more generally, given that DNA collection from an individual before a criminal trial affects the rights to bodily integrity,¹ to personal privacy² and the privilege against self-incrimination,³ while ongoing storage of DNA arguably impacts on the right to privacy and the presumption of innocence.⁴

Rather than exploring these affected rights, or reiterating the science of DNA, the technology of DNA profiling, its significance in criminal investigations, its

- 1 Extant case law in the United States and Europe indicates that DNA collection does not unjustifiably affect the right to bodily integrity. In *United States v Kincade* 379 F3d 813 (9th Cir 2004) (en banc) the intrusion of a blood test for the purposes of DNA collection was described as ‘not significant’ and in *United States v Pool* 645 F Supp 2d 903 (2009) the intrusion was seen as ‘minimal’. The European Court of Human Rights (ECtHR) emphasised in *Juhnke v Turkey*, 13 May 2008, App. No. 52515/99 at para. 72 that Arts 3 and 8 do not ‘prohibit recourse to a medical procedure in defiance of the will of a suspect in order to obtain from him or her evidence of his or her involvement in the commission of a criminal offence’, but this must be warranted on the facts of a particular case and must not constitute inhuman and degrading treatment. Similarly, although compulsory urine tests to detect drug consumption in prisoners interfered with Art. 8, they were deemed ‘necessary in a democratic society ... for the prevention of disorder or crime’ (*Peters v Netherlands*, Commission Application No. 21132/93, 6 April 1994).
- 2 In the absence of a Supreme Court on point, US state courts have supported the forcible collection of DNA from arrestees despite Fourth Amendment challenges: see, e.g., *Anderson v Virginia* 650 SE2d 702 at 706 (Vir 2006); *United States v Pool* 645 F Supp 2d 903 (2009); *Haskell and Ento v Brown* 677 F Supp 2d 1187 (2009). The Grand Chamber of the European Court of Human Rights in *S and Marper v United Kingdom* (2009) 48 EHRR 50 found that the taking of DNA pursued the legitimate aim of ‘linking a particular person to the particular crime of which he or she is suspected’ (at para. 100) and while it recognised the importance of such information in the detection of crime it ‘delimit[ed] the scope of its examination’ to the retention of such persons’ DNA (at para. 106). Despite the finding of breach of the right to privacy under Art. 8 in this specific case, the judgment may be read as approving collection and retention of DNA in limited circumstances notwithstanding the implications for privacy.
- 3 The dicta in *Saunders v United Kingdom* (1997) 23 EHRR 313 at para. 69 and *Schmerber v California* 384 US 757 at 761 (1966) discount decisively physical evidence and therefore DNA from the scope of the privilege against self-incrimination.
- 4 See *S and Marper v United Kingdom* (2009) 48 EHRR 50; *United States v Pool* 645 F Supp 2d 903 at 915 (2009); *United States v Mitchell* 681 F Supp 2d 597 (2009).

probative value or associated evidential problems (which have been assessed ably elsewhere⁵), this article will consider, through policy analysis, the development of non-conviction⁶ databases in the United States and England and Wales, and will examine why the current legal trajectories are in opposite directions. The policies and practices in England and Wales were the most permissive in the common law world as to the populations from whom DNA samples may be taken and retained; for the past decade samples have been taken from arrested and charged persons and retained indefinitely but this is currently being amended to accord with ECtHR case law. In a contrasting trend, the United States, at the federal level, and many American states have been more circumspect in extending DNA collection and retention to non-convicted persons, but significant momentum is gathering towards DNA collection from certain arrestees.

Crime control measures in the US often represent a prototype for other countries, in terms of the trend and direction of policy transfer.⁷ However, rather than the 'American exceptionalism' so often cited in criminological literature,⁸ England and Wales once represented somewhat of an anomaly in regard to surveillance,⁹ with the most expansive scheme of DNA retention for innocent persons in the common law world, though this is to change. Comparing these jurisdictions is instructive due to their shared cultural and common law heritage, and the degree of criminal justice policy transfer between them in a general sense. This article will explore numerous ideological, political and pragmatic reasons which may have hitherto safeguarded non-convicted persons in the United States from DNA sampling and categorisation. Then it will examine the extent to which the law has a determinative function insofar as it may curb or alternatively facilitate policy drivers relating to DNA databases, given that human rights cases now force the reining in of the English approach while the interpretation of the Constitution

5 F. R. Bieber, 'Science and Technology of Forensic DNA Profiling: Current Use and Future Directions' in D. Lazer (ed.), *The Technology of Justice: DNA and the Criminal Justice System* (MIT Press: Massachusetts, 2004) ch. 3; M. Redmayne, 'Doubts and Burdens: DNA Evidence, Probability and the Courts' [1995] Crim LR 464.

6 The term 'non-conviction' is used as shorthand throughout this article in relation to the process of DNA collection and retention which is not dependent on a criminal conviction and occurs regardless of the results of investigation or prosecution. One viable alternative term, 'pre-conviction', may suggest that a conviction does indeed follow, which is not necessarily the case, while 'arrestee' is not appropriate given that the process may apply to persons prior to arrest in England and Wales.

7 T. Jones and T. Newburn, 'Learning from Uncle Sam? Understanding US Influences over UK Crime Control Policy' (2002) 15(1) *Governance* 97; T. Newburn, 'Atlantic Crossings: "Policy Transfer" and Crime Control in the USA and Britain' (2002) 4 *Punishment & Society* 165.

8 See, e.g., T. Jones and T. Newburn, *Policy Transfer and Criminal Justice: Exploring US Influence over British Crime Control Policy* (Open University Press: Maidenhead, 2007) 5.

9 Franko Aas, 'Surveillance: Citizens and the State' (2009) 6(3) *Surveillance & Society* 317 at 318.

permits expansion in the United States. In other words, political imperatives or penological trends are circumscribed by the structure and implementation of the basic law of the state.

DNA and criminal justice

Before considering the powers that exist on both sides of the Atlantic as regards DNA collection and retention, it is useful to discuss briefly the significance of DNA and how it operates in the context of criminal justice. The genetic material in human DNA determines physical characteristics and traits, genetic disorders, susceptibility to disease and ethnic origin. Crucially for the purposes of criminal investigation, an individual's DNA is unique (except in the case of identical twins) and is inherited from both one's parents. As more similarities may be seen in the DNA of siblings and family members when compared with unrelated persons, DNA may reveal familial relationships. Thus, a DNA sample contains a range of intimate personal and family information. In contrast, a DNA profile, generated from a sample, is a set of identifying characteristics from regions of DNA that are not known to provide for any physical characteristics or medical conditions of the person. A profile, which includes a gender indicator, consists of a list of numbers based on specific areas of DNA known as short tandem repeats and thus may only be read and interpreted with the aid of technology.¹⁰ Although profiles are computerised, they still contain 'substantial amounts of unique personal data'¹¹ including information about familial relationships and ethnic origin. Using DNA in criminal investigations involves the comparison of material gathered from crime scenes and samples and/or profiles collected from individuals in the hope of a match which would permit narrowing the investigation to one or more particular persons.

Many fallacies exist about DNA evidence insofar as it is often viewed as completely reliable and beyond question. However, as with other forms of physical evidence, the potential for false positives exists. The profiling system in the UK collects markers from 10 regions or loci of an individual's DNA, whereas the previous system used six and in the United States 13 loci are used.¹² Therefore it is entirely possible that an 'adventitious match' could occur between two DNA profiles: indeed, the current British methodology has been criticised by Alec Jeffreys, the

10 Parliamentary Office of Science and Technology, Postnote, *The National DNA Database*, February 2006, No. 258, available at <<http://www.parliament.uk/documents/post/postpn258.pdf>>, accessed 5 August 2011.

11 *S and Marper v United Kingdom* (2009) 48 EHRR 50 at paras 73–76.

12 FBI, 'Frequently Asked Questions (FAQ) on the CODIS Program and the National DNA Index System', available at <<http://www.fbi.gov/about-us/lab/codis/codis-and-ndis-fact-sheet>>, accessed 5 August 2011.

scientist responsible for developing the method of profiling,¹³ who has called for an increase of the number of markers collected to 15 or 16.¹⁴ While the danger of false matches is recognised in British official documents, it is argued that further testing of additional DNA loci would enable a distinction to be drawn between two such individuals' DNA, except in the case of identical twins.¹⁵ In addition, false matches could also occur as a result of contamination at the time the swab was taken, or during comparison in the laboratory. Furthermore, human error in storage, processing or interpretation is always possible, as with all other physical evidence. It is also conceivable that a positive match could be found between crime scene material and a suspect's DNA which does not denote criminal culpability, by virtue of a person innocently being present at a particular location, or through the 'planting' of evidence, or by the creation of 'false' or mixed DNA.¹⁶ Moreover, despite popular media portrayal, logistical, practical or financial reasons mean that not all crime scenes are swabbed for genetic material, and so comparison with database profiles is not always part of an investigation. Finally, notwithstanding the political hyperbole and lure of scientific evidence, the number of detections and convictions resulting from the matching of crime scene DNA to a personal profile already on the database may be very low, with one estimate as little as 0.3 per cent.¹⁷

The law on DNA collection and retention

The history of and current laws on DNA databases will now be outlined to demonstrate the contrasting trajectories of policy in England and Wales and the United States. The UK's National DNA Database (NDNAD) was set up in 1995 and contains genetic material gathered from all over the United Kingdom (Scotland also has its own discrete database).¹⁸ A number of categories of genetic material are kept on

13 See <<http://www2.le.ac.uk/departments/emfpu/genetics/explained/profiling-history>>, accessed 5 August 2011.

14 House of Commons Select Committee on Science and Technology, *Seventh Report*, Session 2004–05, para. 86.

15 National DNA Database Strategy Board, *National DNA Database Annual Report 2007–09*, 42.

16 See <<http://www.aolnews.com/story/aclu-challenges-californias-dna-law/713971>>, accessed 11 February 2011.

17 House of Commons Home Affairs Committee, *The National DNA Database: Eighth Report of Session 2009–10*, Volume I Report (Stationery Office: London, 2010) para. 6.

18 The provisions in Northern Ireland governing DNA retention are identical to those in England and Wales (Police and Criminal Evidence (Northern Ireland) Order 1989 (SI 1989 No. 1341 (NI 12)), as amended by the Criminal Justice and Police Act 2001). Scotland has its own criminal justice system and a separate and distinct set of laws on this issue. Profiles derived from DNA samples gathered in Scotland are exported to the UK-wide National DNA Database, and thus may be checked against those collected from persons in England, Wales and Northern Ireland. This arrangement is not reciprocated. See P. Johnson and R. Williams, 'DNA and Criminal Investigation: Scotland and the "UK National DNA Database"' (2004) *Scottish Journal of Criminal Justice Studies* 10; L. Campbell, 'DNA Databases and Innocent Persons: Lessons from Scotland?' (2010) 4 *Juridical Review* 285.

the NDNAD, namely biological material collected from crime scenes that relates to an investigation, personal materials taken from a particular named individual identified by the police, and volunteer samples. Profiles are uploaded onto the database under one of these classifications as either crime scene or 'subject' profiles. Proportionately speaking the NDNAD is the largest database of its kind in the world and contained 7.39 per cent of the UK population in 2009,¹⁹ while most recent figures indicate almost 9 per cent coverage.²⁰

The NDNAD was established following the implementation in England and Wales of the Criminal Justice and Public Order Act 1994, Part IV of which permitted the taking and retention of samples from individuals convicted of a recordable offence and the comparison of such samples with stored material. The Police and Criminal Evidence Act 1984 (PACE) had allowed bodily samples to be taken when a person was charged, but samples obtained for DNA analysis were regarded as intimate samples which required consent and collection by a health care professional.²¹ Developments in technology permitted DNA to be extracted from a buccal (mouth) swab, and to this end s. 58 of the 1994 Act facilitated such collection by reclassifying a mouth swab as a non-intimate sample which does not require consent and could be collected by a police officer. While the NDNAD was not put on a statutory footing in the 1994 Act, a policy document from the Home Office outlined details regarding its formation and operation, such as it being an intelligence database only,²² and the latitude granted to police forces regarding the offences which entail DNA collection.²³

Rather than any single piece of consolidating legislation, the following years saw a continuous and incremental expansion in England and Wales of police powers to take and retain DNA samples. The Criminal Evidence (Amendment) Act 1997 allowed non-intimate samples to be collected from imprisoned individuals convicted for certain sexual or violent offences even if convicted before the implementation of the 1994 Act, and from persons acquitted by reason of insanity but

19 House of Lords Constitution Committee, *Surveillance: Citizens and the State*, vol. I (HL Paper 18-I) (2009) para. 180.

20 See National Policing Improvement Agency, *Statistics*, available at <<http://www.npia.police.uk/en/13338.htm>>, accessed 5 August 2011.

21 Section 65. An 'intimate sample' meant a sample of blood, semen or any other tissue fluid, urine, saliva or pubic hair, or a swab taken from a person's body orifice, while a 'non-intimate sample' was a sample of hair other than pubic hair, a sample taken from or from under a nail, a swab taken from any part of a person's body other than a body orifice, or a footprint or a similar impression of any part of a person's body other than a part of his hand.

22 Home Office, *National DNA Database*, Circular 16/95, para. 23.

23 *Ibid.* at para. 40.

detained under the Mental Health Act.²⁴ However, the 1994 Act did not permit retention of DNA samples and the profiles obtained if the individual was acquitted or not prosecuted subsequently. To remedy this perceived lacuna, indefinite retention of DNA was introduced by the Criminal Justice and Police Act 2001,²⁵ prompted by controversy stemming from the decision in *R v Weiras* to the inadmissibility of DNA evidence which should have been destroyed but was illegally retained. The Court of Appeal refused to admit such DNA evidence and quashed the resultant conviction for murder,²⁶ although the House of Lords later held that the issue of admissibility should have been a matter for the trial judge.²⁷ As well as introducing indefinite non-conviction DNA retention, the 2001 Act had retrospective effect in that it validated the status of samples improperly held on the database. Moreover, the Act specified that retention is permitted only for the purposes of prevention and detection of crime, the investigation of an offence or the conduct of a prosecution.²⁸

The Criminal Justice Act 2003 expanded this legal scheme still further to permit DNA sampling from any individual arrested for or informed that he will be reported for a recordable offence²⁹ whether or not detained in a police station or in police custody,³⁰ and to allow for retention regardless of whether he is charged or prosecuted or not. Despite these far-reaching powers, there was no legislative provision in England and Wales as to the process of removal of a profile from the NDNAD which instead is governed by police guidance documents. A person whose DNA record is held on the NDNAD could request the chief constable of the relevant

24 Mental Health Act 1983, ss. 1 and 2.

25 See PACE, s. 64(1A), inserted by the Criminal Justice and Police Act 2001, s. 82(2).

26 *R v Weir* [2000] All ER (D) 751. In 1997 Weir was charged with drug-related offences and a sample of saliva had been taken from him to generate a DNA profile. The charges were discontinued, but the sample was not destroyed as should have occurred as soon as was practicable. The following year a burglary occurred in which one of the victims died and another was seriously injured. The police compared a blood stain found at the crime scene with profiles on the DNA database, and a match of the blood and Weir's DNA profile was identified. He was arrested and two further blood samples confirmed the match. Weir was convicted of murder, burglary and assault and sentenced to life imprisonment. He appealed against conviction, arguing that the sample should have been destroyed, and that any evidence resulting therefrom was inadmissible. The Court of Appeal allowed the appeal and quashed the conviction, finding that the trial judge had no discretion to allow either the first sample or further evidence.

27 *R v Weir* [2001] 2 All ER 216.

28 PACE, s. 64(1A).

29 A recordable offence is one which carries the possibility of a custodial sentence as well as other, non-imprisonable offences in the Schedule to the National Police Records (Recordable Offences) (Amendment) Regulations 2005 (SI 2005 No. 3106).

30 Criminal Justice Act 2003, s. 10.

police force to delete the profile, and this was to be granted at his discretion in exceptional circumstances, such as where a false allegation was made or where the person was unlawfully or wrongly arrested or unlawfully cautioned.³¹ However, these policies were applied unevenly,³² and both the Home Affairs Committee and the ECtHR noted that removal of DNA from the database occurred rarely.³³

In *R v Chief Constable of South Yorkshire Police, ex p. LS and Marper*, S (an acquitted child) and Marper (an adult against whom proceedings were not initiated) sought judicial review of the decision of the police to collect and retain their DNA, but this was rejected by the Divisional Court on the basis that the decision did not contravene either the individual's right to a private life under Article 8 or his right not to be discriminated against under Article 14 of the ECHR.³⁴ The Court of Appeal upheld this on the grounds that the risks to the individual were not great and were outweighed by the benefits of retention.³⁵ Similarly, the House of Lords dismissed the appeal, finding that there was no breach of Article 8, but that if such a breach had occurred it constituted minor interference only, and moreover that retention was proportionate to its aims.³⁶ S and Marper challenged this decision in the ECtHR in Strasbourg³⁷ where the Grand Chamber held that this 'blanket and indiscriminate' retention of DNA violated Article 8³⁸ and favoured limiting non-conviction retention to serious suspected offences for a defined period of time.³⁹ A more restrictive model was constructed by the Crime and Security Act 2010, but this Act was not implemented due to the change of administration in the United Kingdom.

The current Conservative/Liberal Democrat coalition is moving to a more limited approach by means of the Protection of Freedoms Bill, which is currently being debated. The Bill as it stands at the time of writing permits non-conviction DNA

31 Association of Chief Police Officers' Guidance on the Exceptional Case Procedure, available at <<http://www.acpo.police.uk/asp/policies/Data/guidance%20for%20removal%20from%20database.doc>>, accessed 5 August 2011.

32 House of Commons Home Affairs Committee, above n. 17 at para. 16.

33 Ibid. at para. 38; *S and Marper v United Kingdom* (2009) 48 EHRR 50 at para. 35.

34 *R v Chief Constable of South Yorkshire Police, ex p. LS and Marper* [2002] EWHC 478 (Admin).

35 *R v Chief Constable of South Yorkshire Police, ex p. LS and Marper* [2002] EWCA Civ 1275.

36 *R v Chief Constable of South Yorkshire Police, ex p. LS and Marper* [2004] UKHL 39.

37 An individual application may be lodged in the ECtHR by any person, group of individuals, company or NGO who has exhausted domestic remedies and has a complaint about a violation of their right against a country which has ratified the European Convention on Human Rights (ECHR).

38 *S and Marper v United Kingdom* (2009) 48 EHRR 50 at para. 119.

39 Ibid. at paras 109–110.

retention for three years in the case of arrest for certain serious offences.⁴⁰ This may be extended for two years on application to the magistrates' court, and appeal against this decision is permitted to the Crown Court.⁴¹ Although material may be retained pending investigation or proceedings, it must be deleted after acquittal or dropping of proceedings for minor offences.⁴²

In the United States, inclusion in state DNA index systems (SDIS) and the National DNA Index System (NDIS) is governed by state and federal law respectively which often differ considerably in terms of permissible DNA collection and retention. Virginia was the first state in the USA to establish a DNA database, by requiring all convicted sex offenders to provide a DNA sample from 1989 and extending this to all convicted felons in 1990.⁴³ At federal level, the Combined DNA Index System (CODIS) and the NDIS were established in 1998.⁴⁴ This national database contains DNA profiles contributed by federal, state and local laboratories and is subdivided into a Forensic Index, containing profiles deriving from crime scene samples, and an Offender and Arrestee Index.⁴⁵ All 50 states and the District of Columbia participate in NDIS,⁴⁶ and essentially, CODIS allows federal, state and local crime laboratories to exchange and compare DNA profiles.⁴⁷ By the turn of this century all states had legislated for DNA databases, although differences exist in terms of the included populations.

In contrast to England and Wales, DNA has been collected from a more circumscribed range of people in the US at federal level. The DNA Analysis Backlog Elimination Act of 2000⁴⁸ authorised DNA sampling from individuals in the custody of the Bureau of Prisons who were convicted of serious offences, such as homicide, sexual abuse or exploitation, kidnapping, robbery and burglary; this was extended by the USA Patriot Act of 2001 to include terrorism-related crimes⁴⁹ and by the Justice for All Act of 2004 to cover all felonies, violent and sexual crimes.⁵⁰ Arrestee samples could not be uploaded to the federal database until the DNA Fingerprint Act of 2005 required DNA sample collection by US agencies 'from

40 Criminal Procedure (Scotland) Act 1995, ss. 18–20 (as amended).

41 Protection of Freedoms Bill, cl. 63F(7).

42 Protection of Freedoms Bill, cl. 63E.

43 Code of Virginia § 19.2–310.2.

44 FBI, above n. 12.

45 Ibid.

46 Ibid.

47 See National Institute of Justice, *NIJ Special Report: Using DNA to Solve Cold Cases* (US Department of Justice: Washington DC, 2002).

48 Public Law 106-546, 114 Stat. 2726-2737.

49 Public Law 107-56, 115 Stat. 272-402 (2001), Title V.

50 Public Law 108-405, 118 Stat. 2260-2293 (2004), Title II, the 'Debbie Smith Act of 2004'.

individuals who are arrested or from non-U.S. persons who are detained under the authority of the United States'.⁵¹ Expungement occurs on receipt of a court order certifying that the charge has been dismissed or resulted in an acquittal, or that no charges are being brought.⁵²

Almost half of states now have laws authorising arrestee DNA sampling, but these pertain to felonies or offences punishable by a minimum period of imprisonment only.⁵³ Louisiana has one of the broadest schemes in the US, requiring the collection of DNA samples for inclusion in the state database from persons who are arrested for felony offences and other specified offences.⁵⁴ Whereas the United States once appeared reluctant to introduce policies permitting non-conviction DNA retention, such a trend is strengthening. This article considers a number of reasons, ideological, political and pragmatic, in seeking to shed light on the historical differences and current opposing trajectories of England and Wales and the United States in terms of DNA retention.⁵⁵ In an ideological sense, existing laws on, judicial interpretations of and values concerning privacy, searches, and state intervention informed the policies permitted and implemented in relation to DNA collection and retention. Politically speaking, the degree of policy transfer and the actions of policy entrepreneurs have contributed to the ready adoption and expansion of DNA databases, and this is compounded by the prevalence of the notion of risk in political discourse. Moreover, the advancement of DNA technology and available funding are also critical in a pragmatic sense. However, ultimately the interpretation and implementation of constitutional law and human rights governs the scope of the schemes and explains why the trends differ increasingly in both countries.

51 Title X of the Violence Against Women and Department of Justice Reauthorization Act of 2005, Public Law 109-162.

52 Section 2.

53 Alaska, Arizona, California, Kansas, Louisiana, Maryland, Michigan, Minnesota, New Mexico, North and South Carolina, North and South Dakota, Tennessee, Texas, Vermont and Virginia have laws authorising arrestee DNA sampling. See the website of the National Conference of State Legislatures, available at <<http://www.ncsl.org/IssuesResearch/CivilandCriminalJustice/StateLawsonDNADatabases/tabid/12737/Default.aspx>>, accessed 5 August 2011.

54 (SB 346) Act No. 487 of 2003; Chapter 6-A, § 15:609.

55 Similarly see T. Jones and T. Newburn, 'Comparative Criminal Justice Policy-making in the United States and the United Kingdom: The Case of Private Prisons' (2005) 45(1) *British Journal of Criminology* 58; S. Karstedt, 'Durkheim, Tarde and Beyond: The Global Travel of Crime Policies' (2002) 2(2) *Criminology and Criminal Justice* 111; D. Melossi, 'The Cultural Embeddedness of Social Control: Reflections on the Comparison of Italian and North-American Cultures Concerning Punishment' (2001) 5(4) *Theoretical Criminology* 403.

Ideology and DNA databases

The dominant norms engaged by DNA collection and retention are that of privacy⁵⁶ and liberty, and the apparent reluctance to and delay in constructing non-conviction DNA databases in the United States may derive from legally and culturally entrenched ideologies, when contrasted with England and Wales.⁵⁷

The right of privacy

While no express right of privacy exists in the United States, a reasonable expectation of privacy derives from the Fourth Amendment which generally requires judicial authorisation for physical searches, and in addition a tort of privacy exists. Furthermore, statutory protection of personal information collected, retained and used by federal bodies is guaranteed by the Privacy Act 1974. In a constitutional sense, the relevant jurisprudence developed from a dissent in *Olmstead v United States* where, although the majority found wiretapping evidence not to breach the Fourth and Fifth Amendments,⁵⁸ Brandeis J construed the Fourth Amendment broadly to encompass ‘the right to be let alone’.⁵⁹ The US Supreme Court subsequently noted that ‘the “right to be let alone—the most comprehensive of rights and the right most valued by civilized men” is not confined literally to searches and seizures as such, but extends as well to the orderly taking under compulsion of process’.⁶⁰ Although ‘[t]he concept of a constitutional right of privacy still remains largely undefined’,⁶¹ the right to be left alone, deriving from *Cooley* and emphasised by Warren and Brandeis,⁶² encapsulates the quintessentially American conception of protection of privacy, that is a liberty which provides protection from government interference.⁶³

Conversely, it is conceivable that the historical absence of a justiciable right of privacy in England and Wales led to a jurisprudence and a polity that disregarded its importance, thus facilitating the expansion of the DNA database at one stage. Despite the finding in cases such as *Entick v Carrington* that only with due authorisation could a person’s home be entered by agents of the state,⁶⁴ less

56 A. Roberts and N. Taylor, ‘Privacy and the DNA Database’ (2005) *European Human Rights Law Review* 381.

57 D. Carling, ‘Less Privacy Please, We’re British: Investigating Crime with DNA in the U.K. and the U.S.’ (2008) 31 *Hastings International and Comparative Law Review* 487 at 502.

58 277 US 438 (1928).

59 277 US 438 at 478 (1928).

60 *United States v Morton Salt Company* 338 US 632 at 651–2 (1950).

61 *Whalen v Roe* 429 US 589 (1977).

62 S. Warren and L. Brandeis, ‘The Right to Privacy’ (1890) 4 Harv LR 193, citing *Cooley on Torts*, 2nd edn (1888) 29. See D. Glancy, ‘Invention of the Right to Privacy’ (1979) 21(1) *Arizona LR* 1.

63 See *Tehan v United States* 382 US 406 at 416 (1966).

64 *Entick v Carrington* (1765) 19 State Trials 1030 (KB).

judicial emphasis has been placed on the importance of privacy in England than in the United States. As Lord Nicholls emphasised in *Campbell v MGN Ltd*, ‘In this country, unlike the United States of America, there is no over-arching, all-embracing cause of action for “invasion of privacy”’.⁶⁵ While this may overstate the situation in the United States, it echoes the sentiment of Lord Hoffmann in *Wainwright v Home Office*:

What the courts have so far refused to do is to formulate a general principle of ‘invasion of privacy’ (I use the quotation marks to signify doubt about what in such a context the expression would mean) from which the conditions of liability in the particular case can be deduced.⁶⁶

Instead of a right to privacy, the wrongful use of private information in England and Wales has been governed by the cause of action known as breach of confidence.⁶⁷ Moreover, the Data Protection Act 1998 delineates the permissible processing of personal data, but significantly it does not instantiate a right of privacy *per se*.

Of course, this traditional depiction of the British approach to privacy is challenged by the enactment of the Human Rights Act 1998 (HRA) which imported the protections of the European Convention on Human Rights (ECHR) into domestic law, including Article 8 which provides that ‘everyone has the right to respect for his private and family life, his home and his correspondence’. The Act requires legislation to be read and given effect in a way which is compatible with the Convention rights so far as it is possible to do so⁶⁸ and prohibits public authorities from acting in a way which is incompatible with a Convention right.⁶⁹ Nevertheless, in contrast to the remedy for breach of a constitutional right in the United States which is direct insofar as it results in the striking down of offending provisions, the HRA does not permit a policy to be nullified by virtue of the infringement of a right, such as that of privacy. Instead, if the court is satisfied that the provision is incompatible with a Convention right, it may make a declaration of incompatibility.⁷⁰ In this dialogic approach,⁷¹ Parliament then has the

⁶⁵ *Campbell v MGN Ltd* [2004] UKHL 22 at [11].

⁶⁶ *Wainwright v Home Office* [2003] UKHL 53 at [19], *per* Lord Hoffmann.

⁶⁷ *Campbell v MGN Ltd* [2004] UKHL 22 at [13].

⁶⁸ HRA, s. 3(1).

⁶⁹ HRA, s. 6(1).

⁷⁰ HRA, s. 4.

⁷¹ See T. Hickman, ‘Constitutional Dialogue, Constitutional Theories and the Human Rights Act 1998’ [2005] *Public Law* 206.

ability to remedy the situation if it chooses to do so, or a government Minister may make a remedial order to remove the incompatibility.⁷² In addition to this construction of rights protection which provides less of a judicial bulwark against legislative demands than in the United States, the framing of Article 8 provides a less than robust guarantor of privacy as it permits state interference to the extent that it is in accordance with the law and is necessary in a democratic society in the interests of factors including the prevention of disorder or crime.

The traditional absence of a right of privacy may have contributed to a cultural milieu in which policy makers felt that this norm could be abrogated without popular disquiet. Moreover, despite the enactment of the HRA, some English politicians and the superior courts did not internalise either the principle or the right of privacy. Indeed, the extent to which the previous Labour administration favoured an ideology of crime control and surveillance over privacy is exemplified by the proposed national identity scheme and the expansion of CCTV coverage, prompting the Information Commissioner to warn against the possibility of the United Kingdom sleepwalking into what he referred to as a 'surveillance society'.⁷³ While his sentiment is understandable, his choice of words underestimates the political will behind such proposals, such as was evident in the Criminal Justice and Police Act 2001 permitting indefinite DNA retention from non-convicted persons. Moreover, one can perceive lingering judicial scepticism about the notion and significance of privacy in the domestic English courts' decision in *R v Chief Constable of South Yorkshire Police, ex p. LS and Marper*, as described above.⁷⁴ The domestic courts' resistance to the submissions of S and Marper encapsulates a particular and agnostic perspective on the right of privacy.

On the face of it, contrasting conceptions of privacy may go some way towards explaining the relative reluctance to expanding non-conviction DNA databases in the United States. Whitman presents a useful differentiation between continental European privacy protections which pertain to respect and personal dignity, in

72 HRA, s. 10(2). T. Campbell, 'Human Rights: A Culture of Controversy' (1999) 26 *Journal of Law and Society* 6 at 25; C. Gearty, *Can Human Rights Survive?* (Cambridge University Press: Cambridge, 2006) 69 *et seq.* The Joint Committee on Human Rights has recommended that the UK government must clearly state that it is its policy to take steps to remedy any incompatibility as soon as possible after a declaration has become final (Joint Committee on Human Rights, *Monitoring the Government's Response to Court Judgments Finding Breaches of Human Rights*, Sixteenth Report, 28 June 2007, HL 128/HC 728, para. 119).

73 House of Lords Constitution Committee, above n. 9 at para. 2, referring to R. Ford, 'Beware rise of Big Brother state, warns data watchdog', *The Times*, 16 August 2004. The Information Commissioner's Office is an independent public body which upholds information rights in the public interest and promotes freedom of information by public bodies and data privacy.

74 See above, text accompanying n. 34.

contrast to America which is more oriented toward values of liberty.⁷⁵ Thus, the perception in the United States of privacy as freedom in a personal sense,⁷⁶ or as liberty in a political one, rather than privacy as dignity,⁷⁷ may go some way towards explaining the traditional reluctance to classify individuals and thereby monitor them through DNA databases. In Colorado, for example, Senate Bill 241 to permit DNA collection from individuals arrested for felonies divided Republican senators,⁷⁸ and in the US Congress, opposition to a proposal to collect DNA from all arrestees was predicated on the notion of privacy.⁷⁹ However, this depiction of the United States as valorising the right of privacy may not be an accurate modern portrayal, given that other federal and state developments in the United States indicate no necessary aversion to abrogating this norm: the Patriot Act has permitted extensive surveillance since the terrorist attacks in New York,⁸⁰ biometric identification is becoming more commonplace, the use of CCTV is growing, and comprehensive databases of personal information are kept by state agencies such as the Department of Motor Vehicles. Moreover, a straightforward privacy argument is confounded by the more limited approach to DNA collection and retention in Scotland, which shares the same limited conception of privacy as England and Wales and, as part of the UK, has the same structure of human rights protection.⁸¹ This suggests that it may not be the legal right to privacy as such but rather the cultural understanding of legitimate state action and intrusion that affected the introduction and extension of DNA databases, and go some way towards explaining the more positive reception to non-conviction databases in the United States now.

The primacy of liberty

Both underpinning and extending beyond the specific right to privacy, the one-time aversion towards DNA retention in the United States may be explained by the dominance of classical liberal precepts over competing communitarian

75 J. Whitman, 'The Two Western Cultures of Privacy: Dignity Versus Liberty' (2003–2004) 113 *Yale LJ* 1151 at 1160.

76 See R. Post, 'Three Concepts of Privacy' (2000–2001) 89 *Georgetown Law Journal* 2087.

77 Whitman, above n. 75 at 1151.

78 See record of voting at <https://www.votesmart.org/issue_keyvote_member.php?cs_id=25263> and 'DNA collection bill divides Republicans', 28 April 2009, available at <<http://facethestate.com/articles/15759-dna-collection-bill-divides-republicans>>, accessed 5 August 2011.

79 Congressional Record: 14 July 2008 H6440, *per* Ms Jackson-Lee of Texas.

80 See L. Donohue, 'Anglo-American Privacy and Surveillance' (2006) 96(3) *Journal of Criminal Law and Criminology* 1059.

81 In Scotland, a DNA sample may be retained only after prosecution when it does not lead to conviction and only in relation to certain sexual or violent offences and is destroyed three years following the conclusion of proceedings and a sheriff may extend this for no more than two years (Criminal Procedure (Scotland) Act 1995, s. 18A, as amended by the Police, Public Order and Criminal Justice (Scotland) Act 2006).

demands. Crudely speaking, the dominant political principle in the United States is that of individualistic or classical liberalism,⁸² embodied in negative liberty, with an absence of external constraints on action and freedom from interference.⁸³ Such an interpretation of liberalism advocates a limited form of government, and sees the public sphere as legitimate only to the extent that it represents a delegation of a restricted and definite degree of private sovereignty. This resonates, or at least it did until recently, with the extant political culture in the United States to a greater extent than in England and Wales.

It is often felt that a tension inheres in the criminal justice system between due process norms which favour the individual on the one hand, and, on the other, the community's interest in the effective investigation of criminality. New Labour's administration in the United Kingdom sought to 'rebalance' the justice system towards the latter imperative,⁸⁴ a trend which arguably seems less evident in the United States due to the counterbalancing force of constitutional liberal due process. While the precepts of liberalism underpin the British legal system in terms of laws and culture, New Labour, in office until 2010, introduced various criminal justice measures which embodied a certain regressive type of communitarianism. Communitarianism is an epistemological, moral and political ideology⁸⁵ which is differentiated from liberalism by its focus on the community and the importance it places on civil society.⁸⁶ The common thread running through the different varieties of communitarianism centres on the obligations owed to society and the need to tie responsibilities to rights.⁸⁷ The individualistic nature of liberal society is rejected, and a reconfiguration of laws and social arrangements is recommended so as to recognise the centrality of the community. Moreover, the community's rights may compete with individual rights,⁸⁸ and this ascription stems from a desire to protect it as an entity, in addition to its values and members. This line of thought was adopted by New Labour in the United Kingdom in introducing socially conservative and moralistic measures⁸⁹ such as

82 Classical liberalism is allied closely to the norms expounded during the Enlightenment and may be differentiated from the more interventionist welfare liberalism of the 20th century.

83 J. S. Mill, *On Liberty and Other Essays* (J. Gray ed.) (Oxford University Press: Oxford, 1991); I. Berlin, *Two Concepts of Liberty* (Clarendon: Oxford, 1958); I. Kant, *Critique of Practical Reason* (Cambridge University Press: Cambridge, 1997) Part 1, Book 1, ch. 1.

84 Home Office, *Rebalancing the Criminal Justice System in Favour of the Law-abiding Majority: Cutting Crime, Reducing Reoffending and Protecting the Public* (Home Office: London, 2006).

85 H. Tam, *Communitarianism: A New Agenda for Politics and Citizenship* (Macmillan: Basingstoke, 1998) 12.

86 M. Walzer, 'The Communitarian Critique of Liberalism' (1990) 18 *Political Theory* 6 at 7–9.

87 B. Hudson, *Justice in the Risk Society: Challenging and Re-affirming Justice in Late Modernity* (Sage: London, 2003) 94; A. Etzioni, *The Spirit of the Community: Rights, Responsibilities and the Communitarian Agenda* (Fontana Press: London, 1993) 4 and 9.

88 Hudson, above n. 87 at 82–3.

89 G. Hughes, 'Communitarianism and Law and Order' (1996) 16 *Critical Social Policy* 17.

anti-social behaviour orders and in limiting social welfare payments, predicated on the need to tie rights to responsibilities.⁹⁰ As Driver and Martell argue, New Labour's communitarianism was morally conformist, conservative rather than progressive in terms of the family and education, prescriptive insofar as it was defined by politicians and incorporated an individualistic leaning as it strengthened personal moral duties while neglecting corporate responsibility to the community.⁹¹ Extending the DNA database shared these rationales, by its subjugation of the individual's right of privacy and his interest in not being stigmatised to the need to detect and resolve criminal cases.

Invoking the importance of the community in response to the fear of crime plays on defensive reactions⁹² and facilitates the introduction and implementation of repressive elements which purport to protect that community. Moreover, such a variant of communitarianism eases the 'othering' of the suspect, without any finding of criminal guilt.⁹³ This generates a parochial notion of the public interest⁹⁴ in which general governing principles such as liberty or equality may be forgotten. While Etzioni argues that communitarians are not majoritarians and do not advocate a utilitarian sacrifice of individual liberties for the greater good,⁹⁵ the risk is that the internalisation of such ideas in the political sphere will lead to this very consequence. Indeed the legislative expansion and financial support for non-conviction DNA collection and retention in England and Wales embodied this favouring of community interests over due process concerns in the political sphere, and when combined with New Labour's emphasis on law and order accounts for the bullish developments in England and Wales.

Political support for DNA databases

In addition to the impact of prevailing ideologies, specific policy entrepreneurs are crucial to the growth of DNA databases, and their actions are often coterminous with a crisis of some sort. This is apparent in policy development in England and Wales. Furthermore, when their presence coalesces with the discourse of risk, the appeal of this crime control tactic is enhanced, as is

90 ASBOs were introduced by the Crime and Disorder Act 1998. For an outline of the welfare changes brought in by New Labour, see J. Hills, *Thatcherism, New Labour and the Welfare State* CASE/13 (Centre for Analysis of Social Exclusion: London, 1998).

91 S. Driver and L. Martell, 'New Labour's Communitarianisms' (1997) 17 *Critical Social Policy* 27 at 35 *et seq.*

92 Hudson, above n. 87 at 91.

93 D. Garland, *The Culture of Control* (Oxford University Press: Oxford, 2001) 134 *et seq.*

94 A. Crawford, *The Local Governance of Crime: Appeals to Community and Partnerships* (Oxford University Press: Oxford, 1999) 253.

95 Etzioni, above n. 87 at 255; A. Etzioni (ed.), *The Essential Communitarian Reader* (Rowman and Littlefield: Maryland, 1998) xiv.

increasingly evident in the United States. The intersection of political culture, the politicisation of crime, and the cohesiveness of relevant institutions are seen by Ismaili to provide the contextual features which determine the policies introduced in criminal justice.⁹⁶ In relation to non-conviction DNA databases, the undeniable value of genetic material to criminal justice and the desire to adopt scientific means to counter serious crime provide weighty imperatives for the expansion of the populations of DNA databases, especially when an advocate supports or pushes for legal amendment.

Policy enterprise

Incremental developments in the United States indicate a contrasting trajectory of laws and policies when compared with England and Wales, in that the ECtHR decision in *S and Marper* is forcing legal contraction in the latter. While it is questionable whether these changes in the United States involve policy transfer as such, which would require purposeful imitative activity, there is evidence certainly of policy diffusion or convergence which involves societies becoming more alike purely by the successive adoption of specific policy approaches.⁹⁷ US state agencies and projects⁹⁸ and periodical police literature⁹⁹ on DNA databases cite the 'UK [sic] experience' approvingly, while academic commentary in American law reviews critically the English approach.¹⁰⁰ Nevertheless, an exploration of US Senate and local debates indicates little evidence in political discourse or legislative debate of conscious or explicit emulation of England.

96 K. Ismaili, 'Contextualizing the Criminal Justice Policy-making Process' (2006) 17 *Criminal Justice Policy Review* 255 at 262 (Fig. 1).

97 Jones and Newburn, above n. 7 at 103; C. Bennett, 'What is Policy Convergence and What Causes It?' (1991) 21 *British Journal of Political Science* 215 at 220-1.

98 See the US National Institute of Justice DNA Initiative: <<http://www.dna.gov/solving-crimes/property-crimes/uk-experience>>; the Human Genome Project (HGP) coordinated by the US Department of Energy and the National Institute of Health: <http://www.ornl.gov/sci/techresources/Human_Genome/elsi/forensics.shtml>, accessed 5 August 2011; W. M. Dale, O. Greenspan and D. Orokos, *DNA Forensics: Expanding Uses and Information Sharing* (National Consortium for Justice Information and Statistics: California, 2006) 3; C. H. Asplen Smith, *The Application of DNA Technology in England and Wales* (Smith, Alling, Lane: Washington, 2004) available at <<http://www.ncjrs.gov/pdffiles1/nij/grants/203971.pdf>>, accessed 5 August 2011.

99 K. Wallentine, 'Collection of DNA upon Arrest: Expanding Investigative Frontiers', *The Police Chief*, July 2011, available at <http://policechiefmagazine.org/magazine/index.cfm?fuseaction=display&issue_id=12010&category_ID=3>, accessed 5 August 2011.

100 See D. H. Kaye, 'Two Fallacies about DNA Data Banks for Law Enforcement' (2001) 67 *Brooklyn LR* 179; M. A. Rothstein and S. Carnahan, 'Legal and Policy Issues in Expanding the Scope of Law Enforcement DNA Data Banks' (2001) 67 *Brooklyn LR* 127; M. A. Rothstein and M. K. Talbott, 'The Expanding Use of DNA in Law Enforcement: What Role for Privacy?' (2006) 34(2) *Journal of Law and Medical Ethics* 153; M. Hibbert, 'DNA Databanks: Law Enforcement's Greatest Surveillance Tool' (1999) 34(3) *Wake Forest LR* 767.

Alteration to the extent of the population of DNA databases is influenced considerably by political agents or ‘entrepreneurs’.¹⁰¹ The notion of a ‘moral entrepreneur’ was first propounded by Becker, depicting a person who campaigns for the creation and enforcement of a given rule to remedy a perceived wrong, evil, or social problem.¹⁰² For Becker, such an enterprise entailed highlighting the rule and its breach, followed by robust enforcement so as to both justify the role and position of the entrepreneur and gain public approval. Becker was particularly interested in how labelling an individual in this manner could serve to ‘create’ deviancy and thereby contribute to the commission of criminality.¹⁰³ Building on Becker’s work, other commentators have characterised agents in policy making as public, social or norm entrepreneurs.¹⁰⁴ Roberts and King describe ‘public entrepreneurship’ as the process of introducing innovation into the public sector; this may be through the introduction of a novel means of addressing criminality and criminal investigation.¹⁰⁵ They differentiate forms of public entrepreneurs by means of a typology, comprising political entrepreneurs with elected leadership positions in government; executive entrepreneurs who hold appointed leadership positions in government; bureaucratic entrepreneurs holding formal although not leadership positions in government; and policy entrepreneurs, who work outside the formal governmental system.¹⁰⁶ In addition, ‘policy champions’ possess formal power and resource control and thus are central to the introduction and implementation of a particular policy.¹⁰⁷

Rather than moral entrepreneurs, a range of public entrepreneurs was instrumental in the expansion of DNA databases in England and Wales, and increasingly account for policy expansion in the United States. When combined with victim support and intersecting with a high-profile case,¹⁰⁸ the action of public entrepre-

101 D. Pozen, ‘We Are All Entrepreneurs Now’ (2008) 43 Wake Forest LR 283, 283.

102 H. Becker, *Outsiders: Studies in the Sociology of Deviance* (Free Press: New York, 1963) 147–63.

103 The particular moral entrepreneur cited by Becker in his study of the labelling process was the Federal Bureau of Narcotics which crusaded against the sale and use of marijuana. Commercial dealings in cannabis, hemp and marijuana were taxed by the Marihuana Tax Act 1937. By portraying users and the drugs in a particular way, and by emphasising the immorality of drug taking and favouring personal responsibility, the Bureau was able to generate enough concern as to expedite the introduction of robust legislation and to bolster its own influence and funding.

104 See Pozen, above n. 101.

105 N. Roberts and P. King, ‘Policy Entrepreneurs: Their Activity Structure and Function in the Policy Process’ (1991) 1(2) *Journal of Public Administration Research and Theory* 147.

106 Ibid. at 152, referring to N. Roberts and P. King, ‘Public Entrepreneurship: A Typology’, paper presented to the Academy of Management Meetings, Public Sector Division, 1989.

107 Ibid. referring to H. Angle and A. Van de Ven, ‘Suggestions for Managing the Innovation Journey’ in A. Van de Ven, H. Angle and M. Poole (eds), *Research on the Management of Innovation* (Harper and Row: New York, 1989) 663–97.

108 See, e.g., National DNA Database Strategy Board, above n. 15 at 8–9.

neurs is critical. The NDNAD was established originally by means of the Criminal Justice and Public Order Act 1994, introduced by Michael Howard, Home Secretary of the Conservative Government. This Act (controversial in many other respects¹⁰⁹) was followed by steady growth of the database, with cross-party support. Thus, successive Home Secretaries and other Labour MPs who voted in favour of the numerous Acts may be regarded as political entrepreneurs, while Labour Prime Ministers Tony Blair and Gordon Brown were executive entrepreneurs with regard to the NDNAD.¹¹⁰ Likewise, in the American states which have introduced non-conviction DNA databases, there is generally a public entrepreneur of some sort endorsing such policy development. For example, Maryland recently amended its DNA database system to permit DNA collection from certain arrestees and uploading to the state database,¹¹¹ and this was pushed through vigorously by Governor O'Malley with the support of the Democratic Party.¹¹² Governor O'Malley sought to address the privacy concerns which arise in relation to non-conviction databases¹¹³ by safeguards such as waiting until the first scheduled arraignment date before DNA is analysed and automatic deletion of samples upon acquittal or dismissal of charges. Similarly, the California Penal Code was amended by Proposition 69 which requires DNA collection by buccal swab from any adult person who is arrested for or charged with a felony offence,¹¹⁴ and this was passed by voters in November 2004 with the support of the Governor of California Arnold Schwarzenegger and the California State Attorney-General.¹¹⁵ At the federal level, the central policy entrepreneur in the US Senate regarding non-conviction DNA databases is Jon Kyl, Senator for Arizona and Republican Whip. He introduced the DNA Fingerprint Act of 2005 'to allow State and Federal law enforcement to catch rapists, murderers, and other violent criminals whom it otherwise would be impossible to identify and arrest'.¹¹⁶ Furthermore, the most powerful policy champion of them all, the American President Barack Obama, expressed his support for DNA sampling upon arrest when interviewed by John Walsh of

109 The Act permits inferences to be drawn from silence (ss 34–39), and criminalised raves and certain forms of protest.

110 Gordon Brown, 'Speech on Security and Liberty', Institute of Public Policy Research, 17 June 2008, available at <<http://webarchive.nationalarchives.gov.uk/+http://www.number10.gov.uk/Page15785>>, accessed 5 August 2011.

111 Chapter 337 (Senate Bill 211); Article: Public Safety; Title 2, Subtitle 5: Statewide DNA Data Base System.

112 See <<http://www.governor.maryland.gov/speeches/090909.asp>>, accessed 5 August 2011.

113 Ibid.

114 Penal Code, s. 296(a)(2)(C).

115 'ACLU Lawsuit Challenges California's Mandatory DNA Collection at Arrest', available at <http://www.aclunc.org/news/press_releases/aclu_lawsuit_challenges_california%27s_mandatory_dna_collection_at_arrest.shtml>, accessed 5 August 2011.

116 Senate Congressional Record, 29 July 2005, S9528; Senate Congressional Record, 16 December 2005, S13756, *per* Jon Kyl.

America's Most Wanted, indicating that non-conviction DNA databases are likely to grow in strength in the United States.

Policy entrepreneurs often rely on or are supported by victims, their families and advocacy groups. In the 2010 general election, Labour pledged to refrain from limiting the database to the greatest extent permissible under the ECHR and cited the support of Linda Bowman whose daughter Sally Anne Bowman was murdered in a crime solved using crucial DNA evidence.¹¹⁷ This embodies the trend noted by commentators such as Garland whereby victims or their families become central and representative characters, whose interests are often invoked to support punitive measures.¹¹⁸ Akin to co-opting of victim support by Labour, Proposition 69 was sponsored by Bruce Harrington whose brother and sister-in-law were murdered,¹¹⁹ while at the federal level, the DNA Fingerprint Act was endorsed by the Rape, Abuse & Incest National Network.¹²⁰ The involvement of victims, families and support groups in this way provides a weighty and persuasive endorsement for non-conviction databases. Moreover, the presence of a crisis regarding DNA evidence may provide a policy window¹²¹ for the introduction of legislation expanding the populations, such as occurred in relation to *R v Weir*.¹²² Indeed, Johnson and Williams note that Scotland has never had an equivalent case where conviction was based on illegally held DNA and posit that this, combined with lack of resources, may explain the more limited scheme there rather than any ideological matter.¹²³ This notion of a policy window is particularly pronounced in the United States, where non-conviction DNA collection laws are named after victims. For example, in Arkansas Juli's Law (named after murder victim Juli Busken) permits a law enforcement official at the receiving criminal detention facility to take a DNA sample of a person arrested for capital or first degree murder, kidnapping and sexual assault.¹²⁴ Similarly, Katie's Law in New Mexico, emulated at the federal level,¹²⁵ derives its name from murder victim Katie Sepich whose parents 'crusad[e] tirelessly to help pass arrestee DNA laws nationwide'.¹²⁶

117 McCartney *et al.* note that in fact, the procedure under which Sally Anne Bowman's killer was detected would not be affected by the decision in *S and Marper*. C. McCartney, R. Williams and T. Wilson, *The Future of Forensic Bioinformation* (Nuffield Foundation: London, 2010) 1.22.

118 Garland, above n. 93 at 11–12 and 144.

119 See Anna Gorman, 'Murder Victims' Relative Seeks Wider State DNA Database', *Los Angeles Times*, 22 December 2003.

120 RAINN, 'Fighting Sexual Violence with DNA', available at <<http://www.rainn.org/public-policy/legislative-agenda/fighting-sexual-violence-with-DNA>>, accessed 5 August 2011.

121 J. Kingdon, *Agendas, Alternatives, and Public Policies*, 2nd edn (Longman: New York, 1995).

122 See above n. 26.

123 Johnson and Williams, above n. 18.

124 Arkansas Act 1974, s. 6.

125 See below n. 170.

126 House of Representatives, 18 May 2010, H3503–3504, *per* Tom Rooney.

Seeking to counter the effect of such policy enterprise, various non-profit organisations have opposed non-conviction DNA databases through campaigns and policy documents¹²⁷ and by participating as *amicus curiae* in relevant cases.¹²⁸ In *Haskell and Ento v Brown* the American Civil Liberties Union (ACLU) filed a motion for a preliminary injunction to prevent state collection and storage of the DNA of arrestees,¹²⁹ although this was denied by the US District Court for the Northern District of California. In Maryland a compromise was reached due to the opposition of the Legislative Black Caucus of Maryland to Governor O'Malley's initial proposal, due to the absence of a warrant before collection, the exacerbation of racial bias in the criminal justice system and concerns about overwhelming crime labs with meaningless DNA samples. The Caucus sought numerous safeguards such as a prohibition on sample collection before charging, a prohibition on familial searching and that no samples be entered into any database until after arraignment was granted,¹³⁰ all of which were granted. By limiting collection and retention to certain violent offences and burglary, by imposing safeguards, and by emphasising that 'the purpose [of a DNA profile] is akin to that of a fingerprint',¹³¹ the General Assembly in Maryland passed the Bill which came into effect on 1 January 2009. Thus, the dynamic between executive and political entrepreneurs and other engaged and vocal political actors led to a moderated form of non-conviction databases.

In England and Wales, the non-conviction DNA database finally became an issue of political debate in 2006¹³² with the Liberal Democrats and the Conservatives pledging to rein in its scope. After the ECtHR's decision in *S and Marper* castigated the United Kingdom for its DNA collection and retention policies in England and Wales, Labour introduced the Crime and Security Bill 2009 to provide a slightly more restrictive model of non-conviction DNA retention. Although the Conserva-

127 Liberty, *Response to 'Keeping the Right People on the DNA Database'* (Liberty: London, 2009) 29; Liberty, *Response to the Human Genetic Commission's Consultation on the National DNA Database* (Liberty: London, 2008). Advocacy groups like the Privacy Rights Clearinghouse, the Privacy and Freedom Center of the American Conservative Union and the Council for Responsible Genetics, the American Civil Liberties Union, and Ronald Hampton of the National Black Police Association opposed Proposition 69. See <http://www.aclunc.org/news/press_releases/aclu_lawsuit_challenges_california%27s_mandatory_dna_collection_at_arrest.shtml>, accessed 5 August 2011.

128 For example, the Electronic Privacy Information Centre in *United States v Kincade* 379 F3d 813 (9th Cir 2004) cert. denied, 544 US 924 (2005). Third-party submissions were received in *S and Marper* from Liberty and Privacy International, see (2009) 48 EHRR 50 at paras 56–57.

129 *Haskell and Ento v Brown* 677 F Supp 2d 1187 (2009).

130 <http://aclu-md.org/aPress/Attachments/LBCM_Comments.pdf>, accessed 5 August 2011.

131 *State v Raines* 857 A2d 19 at 33 (Md 2004).

132 M. Lynch, S. Cole and R. McNally, *Truth Machine: The Contentious History of DNA Fingerprinting* (University of Chicago Press: Chicago, 2008) 51.

tives voted against it at second reading, ultimately the Bill was not challenged, despite the Tories' general opposition to non-conviction DNA databases. Indeed, it was reported that Conservative support was guaranteed by the Labour Home Secretary, Alan Johnson, threatening to withdraw all provisions to the Bill, thus leaving the position as it was.¹³³ Instead of blocking the Bill, the Shadow Home Secretary at the time, Chris Grayling, pledged that if elected the Tories would not permit retention of the DNA profiles of innocent people arrested for minor offences,¹³⁴ and this is manifested in the introduction of the Protection of Freedoms Bill, which is currently being debated.¹³⁵

The politics of risk

The aversion towards risk in US society, the influence of this on policy making and the growing reliance on actuarial methods of crime explain the development of non-conviction DNA databases and provide impetus for further expansion.¹³⁶ A key concern of risk-oriented tactics is public protection which may potentially supersede concern for individual rights.¹³⁷ In fact, due process rights run counter to the notion of risk control¹³⁸ which may overestimate the likelihood of a risk occurring in a bid to protect the majority.

In England and Wales, risk was to the fore in justifying the existence of the non-conviction DNA database. *S and Harper* prompted a lengthy consultation process by the Home Office, ostensibly aimed 'to provide a proportionate balance between protecting communities and protecting the rights of the individual'¹³⁹

133 Alan Travis and Polly Curtis, 'Conservatives drop opposition to DNA proposals following Alan Johnson ultimatum', *Guardian*, 7 April 2010.

134 Ibid.

135 See text above accompanying n. 40.

136 This stems from the seminal work of theorists such as Mary Douglas and Ulrich Beck. See M. Douglas and A. Wildavsky, *Risk and Culture: An Essay on the Selection of Technical and Environmental Dangers* (University of California Press: Berkeley, 1982), and U. Beck, *Risk Society: Towards a New Modernity* (Sheffield Region Centre for Science and Technology: Sheffield, 1992).

137 For a consideration of further problematic aspects of actuarial techniques, see B. Harcourt, *Against Prediction: Profiling, Policing, and Punishing in an Actuarial Age* (University of Chicago Press: Chicago, 2006).

138 While the emphasis on risk in criminal justice policy and discourse may be interpreted as subsuming traditional notions of individual fairness and equity, O'Malley cautions that the concept of risk should not necessarily be regarded as negative: P. O'Malley, 'Risk Societies and the Government of Crime' in M. Brown and J. Pratt (eds), *Dangerous Offenders: Punishment and Social Order* (Routledge: London, 2000) 17. He notes that risk-based tactics and categories may be more incorporative than traditional approaches which involve coercion, exclusion and correction: P. O'Malley, 'Risk, Power and Crime Prevention' (1992) 21 *Economy and Society* 252 at 254.

139 <<http://www.homeoffice.gov.uk/documents/cons-2009-dna-database/>>, accessed 5 August 2011.

although the lack of a rights-focus in the resulting paper¹⁴⁰ is noticeable. The Home Office recommended the destruction of DNA samples after six months, whether the individual is later convicted or not; permanent retention of DNA profiles (as opposed to samples) after conviction; retention for 12 years after arrest for a serious violent or sexual offence or terrorism-related offence and six years for other offences. These periods were chosen based on the likelihood of offending by people who have been arrested and not convicted, drawing on research included in Annex C to the paper which purported to show that 52 per cent of reoffending happens within six years, and two-thirds of reoffending happens within 12 years. The Home Office stressed that changing the existing policy would ‘reduce the number of detections that DNA delivers, and will therefore have some adverse impact on public protection’ and thus it aimed ‘to minimise this risk while complying with the ECtHR ruling’.¹⁴¹ This was an explicit acknowledgement that the Home Office sought to maintain as lengthy a retention period as would be permissible, and the definite emphasis in the consultation document was on risk rather than rights’ analysis: ‘In determining the most suitable retention period, the key question is one of risk’.¹⁴² Although the paper admitted that the evidence for reoffending in more serious and violent cases was unclear, a longer retention period was deemed to be ‘a commonsense approach given the more serious consequences of reoffending and therefore the damage that a missed detection would imply’.¹⁴³ In fact, it is unlikely that the ECtHR would have viewed the proposed 12-year retention period as proportionate, and the appeal to common sense in a document which professes to be scientific is jarring.¹⁴⁴ Moreover, the validity of the methodology in the report is questionable,¹⁴⁵ suggesting that merely the lexicon of risk was cited, as a disguise for the more authoritarian and invasive approach of the NDNAD.

Similarly, studies on so-called ‘preventable crimes’ have been relied upon in policy development in the United States, indicating the growing centrality of risk

140 Home Office, *Keeping the Right People on the Database: Science and Public Protection* (Home Office: London, 2009) para. 2.9.

141 Ibid. at para. 2.9.

142 Ibid. at para. 6.6.

143 Ibid. at para. 6.13.

144 See McCartney *et al.*, above n. 117 at paras 6.7–6.10.

145 K. Soothill and B. Francis, *Keeping Innocent People on the DNA Database* (2009), available as Appendix 1 to *The Information Commissioner’s Response to the Home Office Consultation Paper on the Retention, Use and Destruction of DNA Data and Fingerprints*, available at <http://www.ico.gov.uk/upload/documents/library/data_protection/notices/response_to_ho_consultation_may09.pdf>, accessed 5 August 2011.

there.¹⁴⁶ Two empirical studies carried out in Chicago and Maryland indicate a significant number of violent crimes which could have been prevented had DNA been sampled upon arrest rather than conviction,¹⁴⁷ and these have been cited on numerous occasions at the federal and state level.¹⁴⁸ Such reference to science in criminal justice appeals to politicians who prefer the expertise of technical scientists who are seen as objective and non-ideological, in contrast to the 'softer' and by implication ideologically driven expertise of human rights lawyers, criminologists, psychologists and political scientists, who are increasingly neglected in the policy-making process. Indeed, one could also consider the issue not solely as one of 'hard' versus 'soft' social science, but also centring around the independence of the research: while plenty of criminologists could have carried out 'hard' quantitative studies of this issue, existing studies have been performed in-house on behalf of state and government bodies. The use of science in the criminal process in this manner is ostensibly 'universal, general, uniform, and neutral'¹⁴⁹ and fits with the distrust of certain professionals, criminologists, officials and practitioners identified by Rock in the Home Office in the mid-1990s¹⁵⁰ and the pervasive fall of 'liberal elitism' in the governance of crime.¹⁵¹ Thus, while collection and retention of DNA encroaches on civil liberties, policy makers couch the debate in terms of empirical validity and scientific methodology, supported by in-house research, to ensure their palatability.

In a related concept, Feeley and Simon observed almost two decades ago that a new penology, with revised discourses, objectives and techniques, was

146 For example, see the Minutes of the Meeting of the Assembly Committee of Nevada on the Judiciary, Seventy-Fifth Session, 13 March 2009; Maryland Politics Watch, 'O'Malley Comments on DNA Collection', 26 March 2009, available at <<http://maryland-politics.blogspot.com/2009/03/omalley-comments-on-dna-collection.html>>, accessed 5 August 2011; 'House Judiciary Committee Adopts Schiff Amendments to Improve DNA Tools for Law Enforcement and Investigators and Eliminate DNA Backlogs', 11 June 2008, available at <<http://schiff.house.gov/index.cfm?sectionid=124&parentid=25§iontree=6,25,124&itemid=276>>, accessed 5 August 2011.

147 See <http://sccvc.org/sccvc/news/Chicagos_Study_on_Preventable_Crimes03-04-2008.pdf>; <http://www.denverda.org/DNA_Documents/MarylandDNAarresteestudy.pdf>, accessed 5 August 2011.

148 See Congressional Records (Senate), 29 July 2005, S9528 *et seq.* and Congressional Records (Senate), 16 December 2005, S13756, *per* Mr Kyl; Congressional Records (Senate), 14 July 2008, H6438 and Congressional Records (Senate), 10 December 2009, S12904–S12907, *per* Mr Schiff.

149 R. Ericson and C. Shearing, 'The Scientification of Police Work' in G. Bohme and N. Stehr (eds), *The Knowledge Society* (Kluwer Publishing: Dordrecht, 1986) 133.

150 P. Rock, 'The Opening Stages of Criminal Justice Policy Making' (1995) 35(1) *British Journal of Criminology* 1 at 2.

151 See I. Loader, 'Fall of the "Platonic Guardians": Liberalism, Criminology and Political Responses to Crime in England and Wales' (2006) 46 *British Journal of Criminology* 561 at 562 *et seq.*

emerging,¹⁵² with a shift in discourse from retribution to the language of probability, and in which offenders are regarded as aggregates rather than individuals. The focus is less on the responsibility, culpability and treatment of individuals, but rather on techniques to identify, categorise and manage groups according to their dangerousness: '[t]he task is managerial, not transformative'.¹⁵³ As has also been argued in relation to CCTV,¹⁵⁴ non-conviction DNA collection and retention incorporates aspects of the new penology with its 'adaptive' strategies and emphasis on crime prevention.¹⁵⁵ Indeed, DNA retention is paradigmatic of the new penology, given that it subsumes individual characteristics by a standard which applies to suspected offenders as a class yet does not seek to alter them or the social situation. Moreover, the new penology also focuses on the notion of a career criminal, where the primary concern is the identification of such high-risk offenders to incapacitate and manage them.¹⁵⁶ As Johnson and Williams emphasise, the notion of the recidivist offender is key to DNA collection and retention,¹⁵⁷ and this was demonstrated by the Home Office report which seems to regard all arrestees and suspects as likely to 'reoffend' despite the absence of an initial finding of guilt.¹⁵⁸ This underlines the assumption that the individual whose genetic material has been taken at arrest is guilty of the suspected offence, and again contributed to political acceptance of DNA retention.

Practical support for DNA databases

In addition to, or perhaps instead of, these ideologically and politically grounded arguments are some more practical or banal explanations for non-conviction DNA database expansion, namely the development of DNA technology and the availability of funding. Eschewing the significance of legal or principled factors, we may look to the fact that much of the relevant technology and methodology used in DNA sample comparison and profiling originated in the United Kingdom. DNA profiling was developed by Professor Alec Jeffreys at the University of Leicester,

152 M. Feeley and J. Simon, 'The New Penology: Notes on the Emerging Strategy of Corrections and its Implications' (1992) 30 *Criminology* 449.

153 *Ibid.* at 449–52.

154 C. Norris and M. McCahill, 'CCTV: Beyond Penal Modernism?' (2006) 46 *British Journal of Criminology* 97.

155 The concept of risk in relation to DNA databases has been more thoroughly explored in C. McCartney, *Forensic Identification and Criminal Justice: Forensic Science, Justice and Risk* (Willan: Cullompton, 2006) xiv; R. Johnson and R. Williams, 'Circuits of Surveillance' (2004) 2(1) *Surveillance & Society* 1 at 11; C. McCartney, 'Forensic DNA Sampling and the England and Wales National DNA Database: A Sceptical Approach' (2004) 12(2) *Critical Criminology* 157 at 165.

156 M. Feeley and J. Simon, 'Actuarial Justice: the Emerging Criminal Law' in D. Nelken (ed.), *The Futures of Criminology* (London: Sage, 1994) 164–5.

157 Johnson and Williams, above n. 155 at 10.

158 Home Office, above n. 140 at para. 2.8.

England, from the mid-1980s onwards,¹⁵⁹ and the UK's Forensic Science Service pioneered the development and implementation of DNA technologies which facilitated the creation of the world's first DNA database in 1995. Thus, England and Wales had both the available technology and the impetus to stay at the cutting edge by using such tactics. As McCartney *et al.* note, the content of the criminal law may be influenced by practical considerations such as technological developments occurring simultaneously with the emergence of a competitive forensic marketplace and the absence of a backlog of genetic material to process (in contrast to the US¹⁶⁰).¹⁶¹ Indeed, in *S and Marper v United Kingdom*, the government emphasised that the United Kingdom 'is in the vanguard of the development of the use of DNA samples in the detection of crime',¹⁶² thereby explaining and justifying the size and resources of its DNA database. However, the court considered that any state claiming a 'pioneer role' bears special responsibility for striking the right balance between crime control and privacy,¹⁶³ rather than acquiring a *carte blanche* to extend this investigative method.

Furthermore, the development of law relating to DNA collection and retention in England was matched by specific increased funding via the DNA Expansion Programme, as well as training for police officers and scientific personnel.¹⁶⁴ This was critical to ensure implementation of the law, and, when combined with the ideological and political factors previously outlined, conspired to permit dramatic growth of the non-conviction DNA database. Although the funding made available for the project is certainly a function of the existing political support, the current economically straitened times may begin to impact upon the UK DNA database. The Forensic Science Service (FSS), which has the contract to provide operational services for the NDNAD, and which receives and loads profiles to the NDNAD and searches it for matches,¹⁶⁵ is to close in 2012.¹⁶⁶ Given the range of 'austerity' measures being introduced in light of the economic recession, the rapidly

159 See above n. 13.

160 See National Institute of Justice, 'DNA Evidence Backlogs: Forensic Casework', available at <<http://www.ojp.usdoj.gov/nij/topics/forensics/lab-operations/evidence-backlogs/forensic-evidence-backlog.htm>>, accessed 5 August 2011; Dr Christian Hassell, Assistant Director, Laboratory Division Federal Bureau of Investigation Statement before the House Committee on the Judiciary, Subcommittee on Crime, Terrorism, and Homeland Security (Washington DC, 20 May 2010).

161 McCartney *et al.*, above n. 117 at para. 1.9.

162 *S and Marper v United Kingdom* (2009) 48 EHRR 50 at para. 111.

163 *Ibid.* at para. 112.

164 Parliamentary Office of Science and Technology, above n. 10 at 2.

165 Forensic Science Service at <<http://www.forensic.gov.uk/html/company/>>, accessed 5 August 2011.

166 BBC News, 'Forensic Science Service to be wound up', available at <<http://www.bbc.co.uk/news/uk-11989225>>, accessed 5 August 2011.

increasing expenditure on the NDNAD and the previous failure to assess the benefits and costs of this¹⁶⁷ may soon be revisited.

Support for database expansion in the United States is evident in the increased funding for DNA collection and retention, with the Backlog Reduction Funding Awards¹⁶⁸ and the Convicted Offender and Arrestee DNA Backlog Reduction Program.¹⁶⁹ The DNA Expansion and Improvement Act of 2009 introduced a scheme of 'DNA Technology Enhancement Grants' which allows the Attorney-General to issue grants to states and local government totalling \$50 million per year from 2009–13 to buy or improve forensic DNA technology.¹⁷⁰ Moreover, the federal Katie Sepich Enhanced DNA Collection Act of 2010 provides for incentive payments for states to implement enhanced DNA collection processes, that is, from persons arrested for serious offences like homicide, sexual offences, aggravated assault and burglary. If state compliance is ensured owing to such bonuses, a considerable expansion of the CODIS database will result.

The determining power of the law

Contemporary criminal justice and penal policy often demonstrates contradictory rationales and aims, with the co-existence of opposing ideas like incapacitation and correctional reform, and stigmatisation and reintegration. This has been explained by reference to states' adaptation to and denial of high crime rates and the inability to resolve the issue,¹⁷¹ and the conflicting principles of the 'law and order' politics of the New Right which wields considerable power over policy development.¹⁷² In the same manner, while historical resistance to non-conviction DNA databases in the United States may be explained by ideological, political and practical factors, policies allowing for such DNA sampling and retention are likely to proliferate given the aversion towards risk in crime control practices, and the ready enterprise of political and other actors, bolstered by an injection of funds.

167 McCartney *et al.*, above n. 117 at para. 1.4.

168 See Backlog Reduction Funding Awards 2004–10, available at <<http://www.ojp.usdoj.gov/nij/topics/forensics/lab-operations/capacity/backlog-reduction-funding.htm>>, accessed 5 August 2011.

169 DNA Initiative, 'Convicted Offender and Arrestee DNA Backlog Reduction Program', available at <<http://www.dna.gov/funding/convicted/>>, accessed 5 August 2011.

170 DNA Expansion and Improvement Act of 2009, s. 2.

171 Garland, above n. 93 at 110 *et seq.*

172 P. O'Malley, 'Volatile and Contradictory Punishment' (1999) 3 *Theoretical Criminology* 175 at 176 *et seq.*

This article has outlined how numerous factors encouraged the early adoption in England of this crime control technology when compared with the United States; what is now posited is that ultimately, it is the interpretation and implementation of constitutional law and human rights that governs and will determine the scope of the schemes in both countries. As noted, the law in England and Wales in this area was found by the ECtHR to breach the right to privacy as safeguarded by Article 8 of the ECHR.¹⁷³ By signing and ratifying the ECHR, the United Kingdom vouched to guarantee to everyone within its jurisdiction the rights and freedoms defined in the Convention, and granted the ECtHR binding authority to decide cases on such matters. Where the law of a state which is party to an ECtHR case is found to be incompatible with the Convention, national law must be amended to cohere with the decision,¹⁷⁴ as is currently occurring by means of the Protection of Freedoms Bill. This change of the law to accord with the European judgment demonstrates the ultimate superiority of the law.

In the United States approval in state courts of DNA collection and retention has allowed the establishment of and safeguarded the legitimacy of non-conviction databases. While the US Supreme Court has not yet accepted a case concerning the constitutionality of the collection and retention of DNA from innocent persons, state courts have examined this issue. Despite the more entrenched conceptions of privacy as elucidated above, most courts have approved of this measure. In the American constitutional sense, the compulsory extraction of blood for DNA profiling has been viewed as constituting a 'search' as it falls within the person's 'reasonable expectation of privacy',¹⁷⁵ thus bringing the procedure within the scope of the Fourth Amendment.¹⁷⁶ Constitutional jurisprudence has refined the parameters of the Fourth Amendment to provide that although a search or seizure must usually be conducted with a warrant and with probable cause, it may still be reasonable if obtaining a warrant was impractical, if individualised suspicion exists, or where a 'special need' that goes beyond normal law enforcement purposes was present.¹⁷⁷ The court may also invoke a general balancing approach, the 'totality of circumstances' test, which sets the state interest against that of the individual to determine the reasonableness of the search 'by assessing, on the one hand, the degree to which it intrudes upon an individual's privacy and, on the

173 As previously noted, Scotland has different laws and rules regarding DNA collection and retention.

174 Article 53.

175 *Katz v United States* 389 US 347 (1967).

176 *United States v Kincade* 379 F3d 813 (9th Cir 2004) (en banc).

177 *Schmerber v California* 384 US 757 (1966); *Terry v Ohio* 392 US 1 (1968); *New Jersey v TLO* 469 US 325 (1985). A special need has been found not to exist where the primary aim was to detect evidence of ordinary criminal wrongdoing: *City of Indianapolis v Edmond* 531 US 32 at 44 (2000).

other, the degree to which it is needed for the promotion of legitimate governmental interests'.¹⁷⁸ Every court which has analysed the federal or equivalent state statutes permitting collection and analysis of DNA from convicted persons has upheld them as compliant with the Fourth Amendment,¹⁷⁹ but there is less consistency regarding the position of unconvicted individuals in state courts. For the most part, the general balancing test has been applied to uphold the collection of DNA samples from persons arrested for violent felonies on the basis that it entails a minimal privacy intrusion, and because of the diminished expectation of privacy of arrestees when compared with the general population and the compelling interest in DNA as a law enforcement tool.¹⁸⁰ However, in *Friedman v Boucher and Luzaich* the Ninth Circuit found that the sampling of an arrestee was in breach of the Fourth Amendment.¹⁸¹ Neither the special needs test nor the general balancing test validated DNA collection: the former did not apply since the only government interest in taking DNA was 'to help solve "cold cases" ... clearly a normal law enforcement function', and the search was not reasonable on a balancing approach as the only limitation permitted on pre-trial detainees' right to be free from suspicionless searches was for prison security.¹⁸²

The preceding analysis has indicated that in essence, the development of non-conviction DNA databases is contingent on many legal and political factors, and indeed in England and Wales the combination of political and cultural variables without a robust constitutional framework of protection for individual privacy provided a heady enticement to New Labour to expand the NDNAD. Historical contingencies and constitutional jurisprudence has provided a brake in this regard in the American setting, yet it appears that non-conviction databases will become more common in the United States. While the absence of a distinct right to privacy and the presence of a certain form of communitarian politics may once have eased the expansion of DNA collection and retention in England and

178 *Samson v California* 547 US 843 at 848 (2006).

179 *Jones v Murray* 962 F2d 302 (4th Cir 1992); *United States v Kimler* 335 F3d 1132 (10th Cir 2003); *Groceman v US Department of Justice* 354 F3d 411 (5th Cir 2004); *Green v Berge* 354 F3d 675 (7th Cir 2004); *United States v Kincade* 379 F3d 813 (9th Cir 2004) cert. denied, 544 US 924 (2005); *Nicholas v Goord* 430 F3d 652 (2d Cir 2005); *United States v Sczubelek* 402 F3d 175 (3rd Cir 2005); *Padgett v Donald* 401 F3d 1273 (11th Cir 2005) cert. denied, 546 US 820 (2005); *Wilson v Collins* 517 F3d 421 (6th Cir 2006); *United States v Conley* 453 F3d 674 (6th Cir 2006); *United States v Hook* 471 F3d 766 (7th Cir 2006); *United States v Kraklio* 451 F3d 922 (8th Cir 2006); *United States v Weikert* 504 F3d 1 (1st Cir 2007); *United States v Amerson* 483 F3d 73 (2d Cir 2007); *United States v Kriesel* 508 F3d 941 (9th Cir 2007); *United States v Banks* 490 F3d 1178 (10th Cir 2007).

180 *Anderson v Virginia* 650 SE2d 702 at 706 (Vir 2006); *United States v Pool* 645 F Supp 2d 903 at 912 (2009); *Haskell and Ento v Brown* 677 F Supp 2d 1187 (2009).

181 *Friedman v Boucher and Luzaich* 580 F3d 847 (2009).

182 A similar conclusion was reached in *United States v Mitchell* 681 F Supp 2d 597 (2009).

Wales, the jurisprudence of the ECtHR is now limiting this scheme. In contrast, in the United States the legal norm of privacy and a classical liberal ideology may once have dissuaded policy makers from introducing such measures; nevertheless judicial interpretation of the Constitution now permits the growth of non-conviction databases.